

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Ⓢ

Claims 1-13: Canceled.

Claim 14 (New): A vector for introducing a gene into a plant, which comprises:  
a desired gene, wherein the desired gene is not a selectable marker gene,  
a plant hormone signal transduction gene and a plant hormone synthesis gene together  
as selectable marker genes, and  
a removable DNA element,  
wherein the selectable marker genes are positioned such that they behave integrally  
with the removable DNA element, and  
wherein the desired gene is positioned such that it does not behave integrally with the  
removable DNA element.

Claim 15 (New): The vector according to claim 14, wherein the selectable marker  
gene is present within the removable DNA element.

Claim 16 (New): The vector according to claim 14, wherein the plant hormone  
signal transduction gene is a cytokinin signal transduction gene.

Claim 17 (New): The vector according to claim 16, wherein the cytokinin signal  
transduction gene is the *CKII* gene derived from *Arabidopsis thaliana*.

Claim 18 (New): The vector according to claim 14, wherein the plant hormone synthesis gene is a cytokinin synthesis gene.

Claim 19 (New): The vector according to claim 18, wherein the cytokinin synthesis gene is the isopentenyl transferase (*ipt*) gene which is present on the T-DNA of *Agrobacterium tumefaciens*.

Claim 20 (New): The vector according to claim 14, wherein the removable DNA element is derived from the site-specific recombination system.

Claim 21 (New): A method of expressing a gene in plants, comprising:  
introducing into a plant cell a vector comprising a desired gene and a plant hormone signal transduction gene, wherein the plant hormone signal transduction gene is capable of functioning as a selectable marker gene in the plant,  
wherein

the plant hormone signal transduction gene is expressed in the plant cell, and  
the expression of the plant hormone signal transduction gene in the presence of the plant hormone causes physiologically abnormal behavior in the plant cell, and  
selecting plant cells which show the physiologically abnormal behavior caused by the expression of the plant hormone signal transduction gene.

Claim 22 (New): The method according to claim 21, wherein the vector additionally contains a removable DNA element, and wherein the plant hormone signal transduction gene is positioned such that it behaves integrally with the removable DNA element, and wherein

the desired gene is positioned such that it does not behave integrally with the removable DNA element.

Claim 23 (New): The method according to claim 22, wherein the plant hormone signal transduction gene is present within the removable DNA element.

Claim 24 (New): The method according to claim 21, wherein the vector additionally contains a plant hormone synthesis gene.

Claim 25 (New): The method according to claim 21, wherein the plant hormone signal transduction gene is a cytokinin signal transduction gene.

Claim 26 (New): The method according to claim 25, wherein the cytokinin transduction gene is *CKII* gene derived from *Arabidopsis thaliana*.

Claim 27 (New): The method according to claim 24, wherein the plant hormone signal transduction gene is a cytokinin signal transduction gene.

Claim 28 (New): The method according to claim 27, wherein the cytokinin synthesis gene is the isopentenyl transferase gene (*ipt*) which is present on the T-DNA of *Agrobacterium tumefaciens*.

Claim 29 (New): The method according to claim 22, wherein the removable DNA element is derived from a site-specific recombination system.

Claim 30 (New): The method according to claim 21, wherein the desired gene encodes an enzyme.

Claim 31 (New): A method of expressing a gene in plants, comprising:  
introducing into a plant cell a vector comprising a desired gene and a *CKII* gene,  
wherein the *CKII* gene is capable of functioning as a selectable marker gene in the plant,  
wherein  
the *CKII* gene is expressed in the plant cell, and  
the expression of the *CKII* gene in the presence of a plant hormone causes  
physiologically abnormal behavior in the plant cell, and  
selecting plant cells which show the physiologically abnormal behavior caused by the  
expression of the *CKII* gene.

Claim 32 (New): The method according to claim 31, wherein the vector additionally contains a removable DNA element, and wherein the *CKII* gene is positioned such that it behaves integrally with the removable DNA element, and wherein the desired gene is positioned such that it does not behave integrally with the removable DNA element.

Claim 33 (New): The method according to claim 32, wherein the *CKII* gene is present within the removable DNA element.

Claim 34 (New): The vector according to claim 31, wherein the vector additionally contains a plant hormone synthesis gene.

Application No. 09/477,730  
Reply to Office Action of May 7, 2003

Claim 35 (New): The method according to claim 34, wherein the plant hormone synthesis gene is a cytokinin synthesis gene.

Claim 36 (New): The method according to claim 35, wherein the cytokinin synthesis gene is the isopentenyl transferase gene (*ipt*) which is present on the T-DNA of *Agrobacterium tumefaciens*.

Claim 37 (New): The method according to claim 31, wherein the *CKII* gene is from *Arabidopsis thaliana*.

Claim 38 (New): The method according to claim 32, wherein the removable DNA element is derived from a site-specific recombination system.

Claim 39 (New): The method according to claim 31, wherein the desired gene encodes an enzyme.

Application No. 09/477,730  
Reply to Office Action of May 7, 2003

SUPPORT FOR THE AMENDMENTS

Newly-added Claims 14-39 are supported by the specification at pages 7-46 and by original Claims 1-9. No new matter is believed to have been added to this application by these amendments.